

- III - AMENDED CLAIMS UNDER 37 CFR 1.121**Reply to Claims Rejections - 35 usc § 112**

14. Claim 15 is rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The Applicant regards as the invention the transformation of a concave circular membrane whose the arrow, or thickness, is very large, in a multy waves plane surface whose the thickness, the vertical crest to crest distance, is so little as one wants.

The thin object so made can be wound onto itself in a cylinder, as a paper disk, and easily transported.

There is not particular structural relation between the folded membranous mirror and the folded actuating mambrane.

These two membranes can be folded together, the membranes being in contact, or folded individually.

In the new claims, to avoid confusion, the membranes are folded individually.

The Applicant is very estonished by the difficulties encountered in the comprehension of the folding of concave membranes according to the invention.

This folding method is a very new method, but the Applicant thought that the specification and the drawings were sufficient.

To explain better, if possible, the Applicant adds a new drawing, that is an exemple and not new matter.

Endeed, the Applicant thinks that the best cut showing the limit of the waves is an narrow line, as large can be the mirror.

Claim rejection - 35 USC § 102**What are two independent things ?**

The expression " independent membranes " is ambiguous.

Hutchinson thoroughly describes the peripheral connection between the metal membrane 22 and the reflective flexible membrane 26 via ring 16 and various accessories of sealing.

This peripheral material solidarisation of the two membranes is essential to ensure the sealing between wall 18 and membrane 26 so as to be able to create a depression ensuring the puting of the reflective membrane 26 against the metal membrane 22, thus constituting the parabolic mirror object of the invention.

Under these final conditions, achieving the goal of the invention, the two membranes are perfectly and firmly tied, without possibility of independent movements.

It cannot be said that the membranes are independent, and, in addition, Hutchinson does not describe nor does not assert the independence of the two membranes.

Now, if one considers with the Examiner the manufactures completely independent of the metal membrane 22 and the flexible membrane 26, it can be said that membranes 22 and 26 are independent.

Then, the Applicant does respectfully to observe that, in this meaning, in most cases, the handle and the blade of a knife would be independent devices.

So, what is the better : " Please, lend me your blade and your handle ", or " Please, lend me your knife " ?

To avoid, by lack of time, a certainly very interesting semantic and philosophic discussion about the word " independent ", the Applicant asks respectfully for reinstate the initial claim 1f, slightly amended.

In the mind of the Applicant, " independent " was the better to sum up that the membranous mirror and the actuating membrane were without contact between them, or with an other device.

With this claim 1f slightly amended and the substitute specification, all the objections of the Office Action Summary disappear, absolutely without new matter.

What is an actuating device ?

In the astronomical terminology, a device " actuating " a telescope mirror is a device which alters continuously the shape of a telescope mirror to give to it a perfect shape, under control of a shape controller.

Hutchinson, column 3, lines 50 - 55 describes the constant putting of the reflective membrane 26 against the metallic membrane 22.

The metallic membrane 22 is not an actuating device, but an inert device.

The application being in the astronomic field, the Applicant respectfully point out it is basic to use the particular terminology of this matter.

The Applicant confesses humbly does not remember why he has amended on 11/04/99 the claim 1f and inserted the ambiguous word " independent ".in amended claim 1.

Claims rejection - 35 USC § 103

The elements " memory shape ", " ring " and " independent " being out of the claims, **there is no more subject** for 35 USC § 103.

For the " ring ", the Applicant respectfully point out that the " ring " of the application was an temporary device for handling the membranes, when the ring of Hutchinson is an permanent element of the frame of the mirror.

- III - **Amended Claims under 37 CFR 1.121 (c)**

1 (twice amended) - Telescope optical device comprising a mirror and a device actuating the mirror

characterized in that the mirror and the actuating device are free concave membranes without contact between them, or with an other device, and tied by their central parts to the telescope

45 (new) - Telescope optical device according to claim 1,

characterized in that there are two levels of control to give at the free membranous mirror a perfect shape :

In a first level, an aproximate shape is given to the free actuating membrane by interaction of a magnetic fiels tied to the telescope with magnetic fields generated by actuating membrane;

in a second level, a perfect form is given to the free membranous mirror by electrostatic interaction of the free actuating membrane with the free membranous mirror.

46 (new) - Telescope optical device according to claim 1,

characterized in that by use of the capacitive coupling between the conductive layer of the mirror and specific electrodes of the actuating membrane, the spread electronic integrated in the actuating membrane acts for the self-stabilisation of the shape of the system mirror--actuating membrane.

47 (new) - Telescope optical device according to claim 1,

characterized :

in that, for its folding, the concave membranous mirror is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the membraneous mirror in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

48 (new) - Telescope optical device according to claim 1,

characterized :

in that, for its folding, the concave membranous actuating membrane is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the actuating membrane in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

- IV - AMENDED DRAWINGS

Under 37 CFR 1.121 (d)

NEW SHEET 1/2

On immediate anterior figure 1,

- a) cancelation of the flanges
- b) cancelation of back to back membranes
- c) correction of the indices mistakes

Cancelation of the figures 2, 3, 4, 5, 6, 7

Change of indices

Addition in figure 1 of the former coils 72 (see former figure 1) and former dipole 142 (see former figure 43), generating magnetic field

Insertion of the former figure 35 showing the actuating membrane, with active indices.

NEW SHEET 2/2

Addition of a figure 6 showing a cut of a very thin flat folding, in the form of a narrow line.

This very thin folding is the limit of the alternately concave-convex distorsions of a concave membrane.

US 08/809,620

10/10/08

RAPPORT DE CONTROLE DE TRANSMISSION

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41
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(TE 20081009)

Preliminary reply

2

Drawings 10/10/08

10/10/08-22:51

1

US 08/809,620 (TE20081009)

Preliminary reply to OA mailed on 4/30/08

The other sheets are
(TE 2006 0717a) and
(TE 2006 0717c) already
sent in 2006.

Date : 08 October 2008

To : Mr Thong Q. Nguyen

Art Unit 2872

Via fax 571 273 8300

Application 08/809,620

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Object : Preliminary reply to Office Action Mailed on 4/30/2008

A - There is not amendment filed on 7/12/06, but 7/16/06,
7/17/06 and 7/18/06

B - Substitute specification

Statement 37CFR 1.125(b) - Instruction 37CFR 1.121(3)(i)

C - Drawings

D - Claims later



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D - Claims later

Goulven Vernois
Fax 33 2 97 61 11 27

41 sheets with this
2 sheets Letter
3 sheets drawings
3 sheets (TE20010528)
14 sheets (TE20060717a)
18 sheets (TE20060717c)

Dear Sir,

A - Amendments supposedly filed on 7/12/06 -

I have not found in my files documents which can be filed by PTO on 7/12/06./

I have faxed documents on 7/16/06, 7/17/06 and 7/18/06.

If you have other documents, please give me their references (in the right of top margin).

B - Substitute Specification -

In fax on 7/17/06, reference (TE20060717a), you can see page 3 a new abstract, page 4 an instruction to replace the specification, and page 5 a statement that the substitute specification does not include new matter, under 37CFR 1.125(b).

In an other fax on 7/17/06, reference (TE20060717c), you can see pages 13-17 a working document showing no new matter (these 5 pages sent in previously fax on current 10/05, before rereading of my complete files).

In these situations, I do not understand respectfully your comment, page 3 of your Office Action on 4/30/08, chapter 3, paragraph First, that I have not given the mentioned documents.

Therefore I consider, with your agreement, the Substitute Specification absolutely in order.

C - Drawings -

The drawings must be examined now, with your agreement, only under the substitute specification.

In document (TE20060717a), you can see page 7, lines 4-7, **BRIEF DESCRIPTION OF THE FIGURES**, that it is only 6 figures.

In document (TE20060717c), "Amended prior version", page 7, lines 28-36, you can see also that is only 6 figures in the substitute specification and not 10, as in the former specification.

On an other hand, and with your agreement, I do not understand why you mention former figures 18-20, 35 and 43.

With the substitute specification these former figures 18-20 are become figures 3-5, former figure 35 is become figure 5, former figure 43 is become figure 1, and new figure 57 is become new figure 6.

This is (perfectly, I hope, with your agreement!) explained in document (TE20070509), pages 12-13, second set, faxed on May 13, 2007

The applicant respectfully invites the examiner to see again the document (TE20010528) sent by DHL on 06/28 2001, page 2, to see the path from the 56 former figures numbers to the 10 figures number of the prior version of the current substitute specification.

With a new sheet for the new figure 6, to answer to your request, there are 3 sheets, 1/3, 2/3, 3/3.

The sheet 1/3 is logically, and with your agreement, "New sheet" because it was not in the former drawings a sheet with the former figure 43 (become figure 1) and the former figure 35 (become figure 2).

The sheet 2/3 is "Replacement sheet" because it was in the former drawings one sheet 6/15 with former figures 18, 19 and 20, become figures 3, 4 and 5.

The new sheet 3/3 is of course "New sheet".

(With your agreement, it is illogical to remove this new figure 6 from the sheet where are the figures showing folding of the mirror or actuating membrane, and also not ecological to use one sheet for one single narrow line!)

D - Claims - The reading of 37 CFR 1.121(c), kindly given, shows that these texts can be a perfect machine to eliminate an application, outside its merits, if you agree of course!.

I am going to study them seriously...

Truly Yours

Goulven Vernois